of the benefits of the non-deterioration policy would accrue to persons of limited economic means and residential mobility. These persons would be particularly vulnerable to such adverse impacts as curtailed economic growth, altered urban and rural development trends, constrained national capacity to absorb anticipated population increases, and higher prices for energy and manufactured goods. These impacts could compound the difficulties faced by all levels of government in responding to the needs of the poor, the elderly, racial minorities, and persons otherwise disadvantaged. The Administrator recognizes the concern expressed by the Department of Health, Education, and Welfare that adverse impacts could accrue to persons of limited economic means and residential mobility. Specific comments are solicited on this issue, with emphasis on any factual data relative to the issue. However, it is emphasized that there is no feature in these proposed regulations which would authorize any delays in attainment of the national standards in any area, irrespective of how that area, or any other area, would be classified under these proposed regulations.

Data Considerations. The following information is based on data collected by EPA and supported by public comment. The background information to support these conclusions is available for inspection at the EPA Freedom of Information Office.

1. *Measurement Accuracy:* Although the federal reference method for suspended particulates is adequate for use in measuring the extremely small increments often associated with prevention of significant deterioration, the federal reference methods for other criteria pollutants at low (clean environment) concentrations suffer varying degrees of inadequacy in that the precision of the current methods is not adequate to reliably distinguish between readings approaching the small increments proposed. For example, if a twenty-four hour reading for sulfur dioxide were 100 $\mu g/m^3$, the actual twenty-four hour average can be expected to lie between 53 $\mu g/m^3$ and 147$\mu g/m^3$, which is comparable to the 100 $\mu g/m^3$ increment proposed for the Air Quality Increment Plan. Extensive modification of existing methods, or development of new measurement technology, would be required in order to precisely measure the increments as proposed. However, current instrumentation would be adequate to calibrate and improve current diffusion modeling techniques and to measure compliance with ambient air quality standards.

2. *Air Quality Data:* Monitoring data on suspended particulate concentrations are the only data extensive enough in clean areas to support meaningful analyses. The major conclusion which can be drawn from these data is that vast numbers of measurements would be required to precisely determine a baseline level, and then further extensive measurements would be required to establish any degree of deterioration from that level.

3. *Data Variability:* Normal random variations in pollutant concentration in clean areas, especially for particulate matter, are often of greater magnitude than the incremental increases proposed for use under the original Air Quality Increment Plan. For example, the 1968 maximum concentration at the Grand Canyon for particulates was 126 $\mu g/m^3$ and the annual average was 31 $\mu g/m^3$. In 1969 the maximum concentration was 32 $\mu g/m^3$ and the annual average was 17 ug/m^3. These differences were caused by random variations due primarily to normal meteorological factors, and exceed the allowable air quality increments proposed in the original Air Quality Increment Plan.

4. *Modeling and Simulation Accuracy:* Current diffusion modeling techniques, when uncalibrated and used in the absence of baseline air quality data, can exhibit random errors as high as a factor of two for short term concentrations and a factor of 1.5 for annual averages when compared with known concentrations of pollutants. It should be noted that in assessing most average concentrations, particularly those resulting from multiple sources, significantly better accuracy can be obtained. However, this is not the type of application normally associated with the significant deterioration concept which calls for pre-construction review of individual new sources. It should also be noted, however, that data obtained from current diffusion modeling techniques, while not corresponding to actual conditions in the ambient air, do provide a consistent and reproducible guide which can be used in comparing the relative impact of a source.

Based on these factors concerning the reliability of available field instrumentation and the normal variability of air quality data, it is the Administrator's judgment that a measured incremental increase in concentration over a measured baseline normally cannot be used as the criterion in assessing the significance of a new facility's impact on air quality. However, the use of diffusion modeling as an indicator of a source's compatibility with the land use desires of an area is a valid use of such models.

Most public comments concurred that measured data should not be used as the sole criterion for assessing the incremental increase. Some comments have disputed it, but a review of studies cited in those comments has shown that the measurement methods employed in these studies are quite complex and expensive, and require highly skilled operators and subsequent detailed analysis. These procedures are not currently suitable for the type of widespread field use required to prevent significant deterioration on a nationwide basis.

Summary of Regulations

The regulations proposed herein represent a modification to the Area Classification Plan as proposed in 38 FR 18986. As proposed, the regulations incorporate four basic features:

1. Provisions are made whereby areas would be designated under three classifications: Class I applies to areas in which practically any change in air quality would be considered significant; Class II applies to areas in which deterioration normally accompanying moderate well-controlled growth would be considered insignificant; and Class III applies to those areas in which deterioration up to the national standards would be considered insignificant.

2. The impact of a proposed new source on the applicable "deterioration increment" would be assessed through conventional new source review procedures (i.e., a pre-construction review) applied to proposed facilities in nineteen specific major source categories. The impact of smaller sources and area sources would be included in the "deterioration increments" at the time of review for construction or expansion of one of the specified source categories.

3. The "deterioration" increments in Class I and II areas are firm ceilings which cannot be exceeded by any new major source. However, procedures are included so that areas, both large and small, can be reclassified to allow introduction of sources not compatible with the initial classification, in cases where it is determined that the resulting deterioration would not be "significant".

4. Although the determination of what constitutes "significant" deterioration is intended to be made by the State under these regulations, the Administrator retains review authority over certain State actions.

The regulations as proposed herein take the same general form as the proposed Area Classification Plan, and in the subsequent discussion only the major changes are emphasized.

Sources Subject to the Regulations. The list of sources subject to review has been expanded to include three additional source types—fuel conversion plants (such as coal gasification and oil shale plants), primary lead smelters, and sintering plants. The requirement for review of all sources with potential emission rates in excess of 4,000 tons/year has been deleted because the requirement generally is superfluous.

It is important to note that in this type of approach it is not possible to conduct a pre-construction review of each small source (such as a private home), but rather to concentrate the effort on the important large sources. These regulations do not require pre-construction review of sources other than those specifically listed, but require that these large sources, for which pre-construction review will be carried out, consider the impact of small sources constructed since the effective date of these regulations in determining their incremental impact and comparing it to the allowable increment. This provision is not intended to restrict the activities of States in development of their own source lists for State plans to prevent significant deterioration.

The term "expanded source" has been defined in these regulations in order to avoid possible confusion with the more commonly used term "modified source".

An expanded source is defined as one which intends to increase production through a major capital expenditure. This term deliberately excludes from review under these regulations any fossil fuel-fired electric power plant which increases emissions solely due to switching from a low sulfur to a higher sulfur content fuel. Fuel switching by power plants is being adequately handled under existing federal and state controls, and to impose additional federal controls on these plants would be inconsistent with the recently enacted Energy Supply and Environmental Coordination Act.

The Energy Supply and Environmental Coordination Act of 1974 was not intended to resolve the significant deterioration issue. Nevertheless, it was intended to permit a mechanism by which EPA's Clean Fuels policy could be implemented to the extent that States agree to do so. Accordingly, it would be inappropriate for these proposed regulations to inhibit fuel switching due to a federally imposed "Deterioration Increment," even though all States would have the opportunity to reclassify to a higher classification. It should be noted, however, that States generally do retain the option to inhibit or prevent fuel switching at their discretion.

In actual practice, the regulation proposed herein would permit a power plant which switches fuel to "use up" the entire available deterioration increment, and in some cases exceed the increment, thereby precluding introduction of other major sources in the area unless the area is reclassified.

Area Classification Procedures. The concept of classifying increases in air quality has been only slightly modified from the earlier proposal. The allowed incremental increases in Class I areas are identical to those in the proposed "Zone" I. The allowed increases in Class II areas are similar to those of the proposed "Zone" II: The 3-hour increment has been increased to insure that it is no more stringent than the 24-hour increment under most meteorological and terrain conditions. A Class III area has been specified to formalize the "exception" procedures of the proposed plan. The terminology has been changed from "zoning" to "classification" to avoid confusion with conventional zoning concepts. Under conventional practices, a zone is a relatively small area (e.g., a city block or portion of a county). An area classified under the regulations herein initially would be a much larger area, often consisting of, as a minimum, several large counties. Initial classification of smaller individual areas does not appear feasible because the carryover of pollution from one small area to another could not be adequately controlled.

A Class I designation would involve those areas where almost no change from current air quality patterns is desired. Class II designation would indicate areas where moderate change is desirable but where stringent air quality constraints are nevertheless desired. Class III designation would indicate areas where major industrial or other growth is desired and where increases in concentrations up to the national standards would be insignificant. The basic purpose of this classification procedure would be to require a conscious decision, made publicly with public input, that the intention of the State and the desire of the local population is to provide for the general type of air quality implied by the classification.

The enclosed regulations would designate all areas as Class II effective upon promulgation. Individual States will have sufficient authority to redesignate any area without need for specific new State enabling legislation. Areas may be redesignated as Class I, II or III by the State (or Federal Land Managers or Indian governing bodies as appropriate) provided that at least one public hearing, at which facts relevant to the area's classification may be presented, is held in the area affected and the Administrator is provided with a summary of the information presented at the public hearing. These designations can be accomplished at any time, and can be modified subsequently by the State in the same manner they were set.

States would be encouraged to perform appropriate redesignations as soon as possible. The initial designation as Class II is intended to represent only a tentative determination of what significant deterioration means in most areas, and is subject to a further determination—which only the States can appropriately make—concerning the economic and other factors that may justify a somewhat different level of deterioration as being "significant."

The Administrator would normally approve any redesignation except in the following four cases: (1) where the required procedures were not followed; (2) where the decision was based on inaccurate technical data; (3) where the redesignation authority has arbitrarily and capriciously disregarded relevant environmental, social or economic considerations; or (4) where a State is unwilling to implement the new source review procedures specified in these regulations. There are no limits on how often an area can be redesignated.

For redesignations of Federal or Indian lands, the normal procedures for States would be modified to be consistent with divisions of authority among Federal, State and Indian governing bodies. Nothing in these regulations would convey authority to States over Federal or Indian lands where such authority is not already present in other statutes, but it is anticipated that cooperative procedures will be developed among interested parties to implement these regulations.

Areas should be considered for redesignation as Class I in cases where the location of any polluting industry within the area is inconsistent with current or planned uses for the area, or where it is desirable to protect the area from any further deterioration because it is one of exceptional scenic or recreational value or is ecologically fragile, or where no further major industrial growth is desired irrespective of the existing air quality.

Although the increments for Class II are larger than for Class I, the allowable deterioration associated with a Class II designation is minor, and the Class II quality increments are smaller than the random variations in air quality which are normally caused by natural (predominately meteorological) factors. These Class II increments are sufficiently small that they preclude introduction of certain major sources of air pollution although they do permit introduction of what the Administrator has determined generally represents a reasonable amount of well planned and controlled industry so long as the individual facilities are not unusually large, or are not clustered in one small area.

Areas should be considered for redesignation as Class III where they are intended to experience rapid and major industrial or commercial expansion (including areas in which extensive mineral development is desired), but only in cases where the resulting air quality deterioration would not be considered "significant". In many cases, areas (or portions of areas) which are redesignated as Class III can be expected to satisfy the criteria for designation as an Air Quality Maintenance Area. However, States must assure that proper consideration is given to maintenance of the national standards in all areas, irrespective of the specific definition given to "significant deterioration."

It is important to recognize that area classifications do not necessarily imply current air quality levels or current land use patterns. Instead, the classifications imply the desired degree of change from current levels and patterns. Accordingly, Class III could be applied to a currently pristine area, and Class I could be applied to a less clean area.

The regulations are structured to permit very large areas to initially be redesignated uniformly. The desire for relatively small localities to depart from the general criteria of the surrounding area to allow construction of individual sources which could exceed the incremental increases can be accommodated through the flexibility of the reclassification procedures.

These regulations do not impose any requirements on sources proposed for construction in areas designated as Class III. In these areas, the existing procedures for attainment and maintenance of national standards are intended to prevent "significant" deterioration. Stationary sources in Class III areas are not subject to review under these regulations. States should take care in their redesignation procedures to ensure that Class III areas are sized and situated in such a manner so as to prevent carryover to adjoining areas which are intended to be restricted to Class I or Class II increments.

Source Review Procedures. Introduction of specified new sources, or major expansion of existing sources, are prohibited in Class I and II areas unless: (1) Best Available Control Technology will be applied on those sources for which new source performance

sufficient time to initiate and develop adequate review procedures, and actually accomplish the necessary review, without imposing a moratorium on construction of new sources.

DISCUSSION OF ADDITIONAL PUBLIC COMMENTS

Substantial public comment was received suggesting that the proper course of action would be to request legislative relief from the Congress, i.e., remove from the Clean Air Act the basis for the Court's finding of a requirement to prevent significant deterioration of air quality. Congressional debate and consideration of this issue is currently underway, and will continue; however, the Courts have ordered the Administrator to prevent significant deterioration under the Clean Air Act as presently enacted, and the regulations proposed herein are intended to accomplish that objective in a manner which is in the best interest of the public.

Substantial public comment was also received indicating that additional pollutants (specifically the "automotive pollutants") should be included in the regulations. After careful consideration of the arguments, the Administrator has concluded that ongoing programs are adequate to prevent any significant deterioration due to sources of carbon monoxide, hydrocarbons or nitrogen oxides for the following reasons:

First, the Federal Motor Vehicle Emission Standards are expected to result in sizeable reductions in emissions of those pollutants on an area-wide basis for many years into the future.

Second, a basic requirement for sources under the enclosed concept is the application of Best Available Control Technology (BACT). This level of technology is already required on automobiles in order to comply with the Motor Vehicle Emission Standards, and further actual area-wide emission reductions under the enclosed regulations would be impractical.

Third, carbon monoxide has no identifiable or noticeable effects at concentration levels below the current standards. Unlike TSP and SO_2 it has no observable esthetic impact. Since there are no suspected effects at levels below the standards, it is not reasonable to consider those levels to be "significant."

Fourth, hydrocarbons and oxides of nitrogen are precursors to photochemical oxidants and nitrogen dioxide, but the transformation from the former to the latter takes place over a relatively long time period. It is possible for local concentrations of vehicular activity to result in increased localized emissions of hydrocarbons and oxides of nitrogen, but by the time these emissions are transformed into photochemical oxidants and nitrogen dioxide, the resultant pollutants would be dispersed over a wide area. The motor vehicle emission standards are intended to reduce area-wide concentrations of these pollutants, and no area-wide significant deterioration is expected to result from localized increased vehicular activity (i.e., the effect of area-wide emission reductions would overwhelm any effect of localized emission increases except as already provided for in the indirect source regulations (38 FR 15836, 39 FR 7270)). Further, the source-receptor relationship of these pollutants is difficult to define in other than highly urbanized areas, particularly when only a single isolated source is involved, and hence the procedures appropriate for analysis of SO_2 and TSP would be inappropriate for analysis of hydrocarbons and oxides of nitrogen. However, it may become desirable to control deterioration due to these pollutants, as well as due to possible additional pollutants for which national standards might be set in the future: If this occurs, appropriate revisions to these regulations would be made.

Other Plans Proposed. Some of the public comments received contained alternative proposals by which significant deterioration could be defined and prevented. Most of these proposals were relatively minor variations on one or more of the four proposed alternatives. However, a few groups developed comprehensive plans which differed in concept from the plans proposed by the Administrator.

1. *The Sierra Club Plan.*—The Sierra Club and many other environmental groups advocated a volume averaging approach in which concentrations of pollutants are limited not by ground level measurements, but rather by an average concentration through a spherical space measured within a one kilometer radius from the top of the stack. This plan represents an entirely different concept from the approach used for attainment and maintenance of ambient air quality standards and would require implementation of a unique set of procedures.

As discussed in preceding sections, current air quality monitoring techniques are marginally accurate at low ground level concentrations. The monitoring required by the Sierra Club plan is even less precise, requiring instrumented aircraft and remote sensing devices which are currently of very limited availability. The diffusion modeling required by the propcsal in very clean areas is relatively simple. However, in multiple source areas where it would be desired to take into account emissions from existing sources, the capability does not exist to perform the type of modeling required.

In addition to the difficulties of implementing a volume averaging plan such as proposed by the Sierra Club, the economic impact of the Sierra Club plan would be extremely severe. The type of control technology assumed by the plan's authors is not generally available, and will not be available in the near future. Use of the Sierra Club plan would greatly inhibit increased utilization of U.S. coal reserves and could possibly, through restrictions on emissions of oxides of nitrogen, essentially preclude the use of fossil fuel for power production in large new sources. However, irrespective of the potentially adverse impact of this plan on the Nation's welfare, the plan contains a major conceptual problem: that is, if implemented, the plan would force the use of air pollution consideration as the single overriding factor in land use decisions, with no provisions allowed for other environmental, social, or economic considerations.

2. *The NRDC Plan.*—The Natural Resources Defense Council (NRDC) proposed a per capita emission plan. Under this plan the total emissions in clean areas, plus a five percent increase, would be divided by the total population in clean areas to arrive at the allowed per capita emissions. The total emissions allowed in any area would then be calculated as (the population in the area times (the per capita emission rate). The primary advantages claimed for this proposal are the emphasis on emissions rather than air quality, and the relationship between the level of emissions and the population served. The latter advantage cited by NRDC would in many cases represent a major disadvantage. Because part of the motivation to prevent significant deterioration is concern for currently unquantified but suspected low level effects, it does not seem reasonable to force new polluting development to locate in areas of high population.

This plan would tend to prevent development of currently needed natural resources such as low sulfur coal and oil shale which are located in areas of very low population. In addition, the location of many other facilities such as smelters, paper mills, phosphate rock processing and oil shale retorting are determined by the location of natural resources, not be the population served. Under the per capita emission plan it is unlikely that facilities such as these could be built.

The Administrator has given careful consideration to all of the advice, comments, and suggestions which have been offered in support of this rulemaking activity and recognizes and appreciates the time and effort which has been expended by a large number of organizations and individuals. This extensive public participation has been of inestimable value in the development of these regulations which are proposed here.

There are several questions on which EPA is particularly interested in receiving public comments and relevant data. These include the adequacy of State and local resources to implement the regulations, the interface of these proposed requirements on State and local governments with other Federal and State programs such as the Rural Development Act, and the appropriateness of the air quality increments associated with Class II areas.

Written comments in triplicate may be submitted to the Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attn.: Mr. Padgett. All relevant comments received not later than September 26, 1974 will be considered, and receipt of comments will be acknowledged. Comments received will be available for public inspection

tion during normal business hours at the Office of Public Affairs, 401 M St., S.W., Washington, D.C. 20460.

These regulations are being proposed pursuant to an order of the U.S. District Court for the District of Columbia Circuit in the case of *Sierra Club et al, vs. Administrator of EPA*, issued May 30, 1973, case number 72-1528 (344 F. Supp. 253). This notice of proposed rulemaking is issued under the authority of section 301(a) of the Clean Air Act as amended [42 U.S.C. 1857g(a)].

Dated: August 15, 1974.

JOHN QUARLES,
Acting Administrator.

Subpart A, Part 52, Chapter I, Title 40, Code of Federal Regulations, is proposed to be amended as follows:

Section 52.21 is revised by designating the first paragraph (a) and adding paragraphs (b), (c), (d), (e), and (f) to read as follows:

52.21 Significant deterioration of air quality.

(a) *Plan Disapproval.* Subsequent to May 31, 1972, the Administrator reviewed State implementation plans to determine whether or not the plans permit or prevent significant deterioration of air quality in any portion of any State where the existing air quality is better than one or more of the secondary standards. The review indicates that State plans generally do not contain regulations or procedures specifically addressed to this problem. Accordingly, all State plans are disapproved to the extent that such plans lack procedures or regulations for preventing significant deterioration of air quality in portions of States where air quality is now better than the secondary standards. The disapproval applies to all States listed in Subparts B through DDD of this part. Nothing in this section shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

(b) *Definitions.* For purposes of this section:

(1) The phrase "baseline air quality concentration" refers to both sulfur dioxide and particulate matter and means the sum of ambient concentration levels existing during 1973, those future concentrations estimated to result from sources granted approval for construction or expansion but not yet operating prior to the effective date of this paragraph, and all other concentration increases estimated to result from new sources operating between January 1, 1974, and the effective date of this paragraph. These concentrations can be measured or estimated where appropriate for the area of impact and for all time periods covered by the defined increments. In the case of the maximum three-hour and twenty-four hour concentrations, only the second highest concentrations should be considered.

(2) The phrases "expansion" or "expanded source" refer to any source which intends to increase production through a major capital expenditure.

(3) The phrase "Administrator" means the Administrator of the Environmental Protection Agency or his designated representative.

(4) The phrase "Federal Land Manager" means the head, or his designated representative, of any Department or Agency of the Federal government which administers federally-owned land, including public domain lands.

(5) The phrase "lands of exclusive federal legislative jurisdiction" means lands over which the federal government has received, by whatever method, all governmental authority of the State, with no reservation made to the State except the right to serve process resulting from activities which occurred off the land involved.

(6) The phrase "Indian Reservation" means any federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(7) The phrase "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(8) "Construction" means fabrication, erection, or installation of an affected facility.

(9) "Commenced" means that an owner or operator has undertaken a continuous program of construction or expansion or that an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or expansion.

(c) *Area designation and deterioration increment.* (1) This paragraph applies to all States listed in Subpart B through DDD of this part and to all lands of exclusive federal legislative jurisdiction and Indian Reservations.

(2) (i) For purposes of this paragraph, areas designated as Class I or Class II shall be limited to the following increases in pollutant concentrations over baseline air quality concentration:

	Area designations	
Pollutant	Class I ($\mu g/m^3$)	Class II ($\mu g/m^3$)
Particulate matter:		
Annual geometric mean	5	10
24-hour maximum	10	30
Sulfur dioxide:		
Annual arithmetic mean	2	15
24-hour maximum	5	100
3-hour maximum	25	700

(ii) For purposes of this paragraph, areas designated as Class III shall be limited to concentrations of particulate matter and sulfur dioxide no greater than the national ambient air quality standards.

(3) (i) All areas are designated Class II as of the effective date of this paragraph. Any redesignation shall be determined by the respective States, Federal Land Managers, or Indian governing bodies, as provided below, subject to approval by the Administrator.

(ii) The State may submit to the Administrator a proposal to redesignate areas of the State Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this public hearing is held in accordance with procedures established in § 51.4 of this chapter, and

(b) A summary of the information submitted at the public hearing(s) for the redesignation is provided to the Administrator.

(iii) For lands owned by the Federal Government other than lands of exclusive federal legislative jurisdiction, the State shall propose a redesignation to the Federal Land Manager. This redesignation shall be submitted for approval by the Administrator, provided that:

(a) The requirements of subdivision (ii) of this subparagraph are complied with,

(b) The Federal Land Manager is in agreement with the redesignation, and

(c) All redesignation of Federal land is carried out in a manner consistent with adjacent State and privately owned land.

(iv) A Federal Land Manager may request that the State redesignate Federal lands, or areas affecting Federal lands, and the State shall proceed in accordance with subdivision (iii) of this subparagraph unless the State determines such redesignation would not be in the best public interest.

(v) In the event that disputes between the State and Federal Land Manager over implementation of subdivisions (iii) and (iv) of this subparagraph cannot be resolved, the Executive Office of the President will designate a classification for the area.

(vi) For lands of exclusive federal legislative jurisdiction, the Federal Land Manager shall be responsible for redesignation of such lands, and he may submit to the Administrator a proposal to redesignate areas of such lands Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this hearing is held in accordance with procedures established in § 51.4 of this part, and

(b) A summary of the information submitted at the public hearing(s) for the redesignation is provided to the Administrator, and

(c) Such redesignation is proposed after consultation with the affected State(s).

(vii) Nothing in this section is intended to convey authority to the States over Indian Reservations where such authority is not granted under other laws. For Indian Reservations, the appropriate Indian governing body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this hearing is held in accordance with pro-

cedures established in § 51.4 of this chapter, and

(b) A summary of the information submitted at the public hearing(s) for the redesignation is provided to the Administrator, and

(c) Such redesignation is proposed after consultation with the affected State(s) and, for those lands held in trust, with the approval of the Secretary of the Interior.

(viii) The Administrator shall approve, within 60 days, any redesignation proposed pursuant to this subparagraph as follows:

(a) Any redesignation proposed pursuant to subdivisions (ii), (iii), or (iv) of this subparagraph shall be approved unless the Administrator determines (1) that the requirements of subdivisions (ii) through (iv) of this subparagraph have not been complied with, (2) that the State has arbitrarily and capriciously disregarded relevant environmental, social or economic consideration in any redesignation, or (3) that the State has not requested delegation of responsibilities for carrying out this section.

(b) Any redesignation proposed pursuant to subdivision (vi) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (vi) of this subparagraph have not been complied with, or (2) that a Federal Land Manager has arbitrarily and capriciously disregarded relevant environmental, social or economic considerations in any redesignation.

(c) Any redesignation submitted pursuant to subdivision (vii) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (vii) of this subparagraph have not been complied with, or (2) that an Indian governing body has arbitrarily and capriciously disregarded relevant environmental, social, or economic considerations in any redesignation.

(ix) If the Administrator disapproves any proposed area designation under this subparagraph, the State, Federal Land Manager or Indian governing body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator or reconsidering any area designation determined by the Administrator to be arbitrary and capricious.

(d) *Review of new sources.* (1) This paragraph applies to any new or expanded stationary source of a type identified below in any area designated as Class I or Class II, which has not commenced construction or expansion prior to six months subsequent to the effective date of this paragraph.

(i) Fossil-Fuel Fired Steam Electric Plants of more than 1000 million B.T.U. per hour heat input.

(ii) Coal Cleaning Plants (thermal dryers).

(iii) Kraft Pulp Mill Recovery Furnaces.

(iv) Portland Cement Plants.

(v) Primary Zinc Smelters.

(vi) Iron and Steel Mill Metallurgical Furnaces.

(vii) Primary Aluminum Ore Reduction Plants.

(viii) Primary Copper Smelters.

(ix) Municipal Incinerators capable of charging more than 250 tons of refuse per day.

(x) Sulfuric Acid Plants.

(xi) Petroleum Refineries.

(xii) Lime Plants.

(xiii) Phosphate Rock Processing Plants.

(xiv) By-Product Coke Oven Batteries.

(xv) Sulfur Recovery Plants.

(xvi) Carbon Black Plants (furnace process).

(xvii) Primary Lead Smelters.

(xviii) Fuel Conversion Plants.

(xix) Sintering Plants.

(2) No owner or operator shall commence construction or expansion of a source subject to this paragraph unless the Administrator determines that, on the basis of information submitted pursuant to subparagraph (3) of this paragraph:

(i) The effect on air quality concentrations of the source or expanded portion of the source considered with the effect on air quality concentrations of all other new and expanded sources subject to this paragraph and the estimated changes in air quality caused by general comercial, residential, industrial and other growth in the area affected by the proposed source since the date of promulgation of these regulations will not cause the air quality concentration in any area to be increased above the limits shown in paragraph (c)(2) of this section.

(ii) For sources for which standards of performance for new sources have not been proposed under part 60 of this chapter, the source or expanded portion of the source will apply and operate the best available control technology for minimizing emission of particulate matter and sulfur dioxide. In determining best available control technology for each new or expanded source subject to this section, the Administrator shall consider the following:

(a) The process, fuels, and raw material available and intended to be employed,

(b) The engineering aspects of the application of various types of control techniques,

(c) Process and fuel changes,

(d) The cost of the application of the control techniques, process changes, alternative fuels, etc.,

(e) Any applicable State and local emission limitations, and

(f) Locational and siting considerations.

(3) In making the determinations required by subparagraph (2) of this paragraph, the Administrator shall, as a minimum, require the owner or operator of the source subject to this paragraph to submit: site information, plans, descriptions, specifications, and drawings showing the design of the source, calculations showing the nature and amount of emissions, any other information necessary to determine compliance with any applicable standards of performance for new sources specified in Part 60 of this chapter or any other applicable emission regulations, and the impact that the construction or expansion will have on sulfur dioxide and particulate matter air quality levels. In addition, the owner or operator of the source shall provide information on the nature and extent of general commercial, residential, industrial and other growth which has occurred in the area affected by the source's emissions since the effective date of this paragraph and the estimated impact of such development on ambient concentrations of particulate matter and sulfur dioxide.

(4)(i) Where a new or expanded source is located on Federal lands, such source shall be subject to the procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be in addition to applicable procedures conducted by the Federal Land Manager for administration and protection of the affected Federal lands. Where feasible the Administrator will coordinate his review and hearings with the Federal Land Manager to avoid duplicate administrative procedures.

(ii) New or expanded sources which are located on Indian Reservations shall be subject to procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be administered by the Administrator in cooperation with the Secretary of the Interior.

(iii) Whenever any new or expanded source is subject to action by a Federal agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321) review by the Administrator conducted pursuant to this paragraph shall be coordinated with the broad environmental reviews under that Act, to the maximum extent feasible and reasonable.

(e) *Procedures for Public Participation.* (1)(i) Prior to making the determinations required by paragraph (d) of this section, the Administrator, within 30 days after submittal of an application by the owner or operator, shall provide opportunity for public comment on the information submitted by the owner or operator, on the owner or operator analysis of the effect of such construction or expansion on ambient air quality and the Administrator's proposed approval or disapproval of the owner or operator's application. Opportunity for public comment shall include, as a minimum:

(a) Availability for public inspection in at least one location in the area affected by the source's emissions of the information submitted by the owner or operator, and the Administrator's analysis of effect on air quality.

(b) A 30 day period for submittal of public comment, and

(c) A notice by prominent advertisement in the area affected by the source emissions of the location of the information and analysis specified in paragraph (d) of this section.